## Response to TASC Review of CPG Comments on FFS – March 25, 2013

1. The CPG indicates that EPA is not considering all relevant data. The CAG may want to review any available data that are not considered for the FFS. The CAG may want to discuss with EPA whether any data not considered are likely to affect the preferred remedy selected by EPA.

Based on the statement made above, it is apparent that the CPG is aware of relevant data that EPA is not considering. Rather than having the CAG search for this data, it would be far more productive for the CPG to provide this information for the CAG to consider. However, it would be prudent for EPA to provide an explanation as to why information may have been excluded during the decision making process.

2. The CPG and EPA appear to have different opinions about the extent of natural recovery that is occurring and that may occur in the future. The CAG may want additional information about how natural recover is estimated.

Based on presentations made before the CAG by EPA officials such as Walter Mugdan, the CAG is aware that natural recovery is determined by mathematical modeling of the river. Unfortunately, EPA's modeling for the river has been unsuccessful. Alice Yeh began working on this model in 2004, which was used to inform the 2007 Draft FFS. The model was determined to be insufficient, causing EPA to make necessary revisions. The revised model was presented to the National Remedy Review Board (NRRB) in December, 2012. The NRRB has made the preliminary recommendation that the model be peer reviewed. There are apparently persistent challenges to modeling this river which EPA has not been able to overcome.

At the December 6, 2012 CAG meeting, representatives from the CPG presented their alternative remedial action, which calls for the removal of far less sediment than EPA alternatives. While CPG was aware of the shortcomings of EPA's modeling, they did not produce a model of their own - a significant omission. During discussion about the CPG's proposal, Ray Basso of the EPA indicated that natural recovery rates presented by the CPG were also presented by companies responsible for the remediation of the Hudson River. EPA felt the proposed natural recover rates for the Hudson River were incorrect and maintained that position for the Passaic River.

It is worth noting that the constituents of concern, PCBs and dioxins, were purposefully synthesized to be highly persistent chemicals: they do not degrade naturally. While it is a good gesture to suggest that the CAG learn additional information about how natural recovery is estimated, the details of modeling river dynamics and natural recovery are likely far too technical and advanced for the CAG to gain a meaningful understanding. Furthermore, the information gained by modeling may not generate meaningful return.

3. The CPG indicates that the model used by EPA does not adequately replicate existing conditions and it is likely to produce unreliable results. The CAG may want additional information about the model, assumption and modeling process used by EPA.

The CPG is likely to have its own opinions on the modeling used by the EPA. This has undoubtedly contributed to the CPG working towards creating its own model, which is incomplete as well. However, the NRRB makes final judgment as to whether the river's model is sufficient. Currently, the NRRB have called for EPA's model to be peer reviewed by industry and academic professionals. The opinions of these professionals will be well educated and free from conflicts of interest

4. The CPG indicated that EPA's dredging pilot study is flawed and likely to underestimate dredging production rates because the study failed to account for actual field conditions, such as bridge clearances. The CAG may want to obtain more information about the accuracy of predicted dredging production rates.

The CPG have already compiled information on all of the bridges on the Lower Passaic River, and the restrictions these bridges place on dredging operations, as part of their interim remedy of the hotspot at River Mile 10.9. This information appears to have satisfied the EPA, as they have not publicly questioned the CPG. Since the 2012 Draft FFS is still unavailable to stakeholders and the public, details on the EPA's dredging production rates are unattainable by all parties, including the CPG. The CAG must wait for the 2012 Draft FFS to become available to have a meaningful conversation on this topic.

5. The CPG raises the issue of recontamination of the lower 8 miles of the river from upstream sources. The 2007 Draft FFS does not discuss recontaminated by the upper 9 miles of the river. The CAG may want to ask EPA if recontamination from upstream sources is probable.

Recontamination of the lower 8 miles as a result of sediment being transported downstream has been discussed at CAG meetings. Basic river dynamics inform us that sediment is transported downstream in rivers, making recontamination of the lower 8 miles probable. This has been stated by the Passaic River Coalition and the CPG several times in both written comments and at CAG meetings. For this reason, both the PRC and CPG have advocated remedial activities to begin at

RM17 and progress downstream. Doing so would prevent lower sections of the river from being recontaminated from upstream sediment and it would allow sediment that is resuspended during dredging operations to settle downstream in areas not yet remediated, allowing a greater portion of the contaminant mass to be removed.

EPA has voiced their opinion on these matters at CAG meetings as well. Because a significantly large portion of the contaminant mass is located in the lower 8 miles and it is this contaminant mass that is the greatest source of contamination and driver of risk, they are focusing on the lower 8 miles. EPA has stated will address RM9-17 afterwards. A recently letter written by EPA in response to Hudson County and Wallington's support of the CPG's proposal, EPA elaborated on their position. They stated that, because the Passaic is a tidal river, contaminants are spread both upstream and downstream. Therefore EPA feels beginning upstream and working downstream is a common remedial tactic on other rivers, but it does not benefit remediation of the Passaic River.

6. The CPG disagrees with the statement on page 8 of EPA's stakeholder summary that resuspension of FFS Area sediments from tidal activity and scouring during high flow events is the primary ongoing source of contamination of the FFS study area. The CAG may want to ask EPA to further explain the data that supports EPA's conclusions about the source of contamination. The CAG may want to understand what, if any, assumptions EPA and the CPG are making to reach their different conclusions about the ongoing source of contamination.

Rather than question why the EPA has determined that resuspension of FFS Area sediments from tidal activity and scouring during high flow events is the primary ongoing source of contamination, we would be curious to hear what the CPG's feel is the primary ongoing source. During their presentation at a CAG meeting on December 6, 2012, CPG representatives felt that upstream sewage treatment facilities are the current source. If that is the case, then the CPG and EPA are answering different questions. The primary ongoing source of heavy metal, PCB, and dioxin contamination, the constituents that made this river a CERLCA site, is resusupension due to tidal activity and high flow events.

Since the original industrial sources of contamination on the Lower Passaic River are mainly no longer operational, the contaminated sediment within the river is the source of heavy metal, PCB, and dioxin contamination. Logically, for this to be a source of contamination then there must be a threat of contaminants moving from their current location. Tidal activity on the river does move contaminated sediment both upstream and downstream, but, considering the whole 17 miles of the river below Dundee Dam is a part of this Superfund Site, the overall result is a homogenization of the contaminant mass. Scouring during high flow events will transport hazardous material downstream and into Newark Bay and the New York/New Jersey Harbor Estuary.

7. The 2007 Draft FFS includes human health risk assessment from fish consumption, but there is no information about irks from other recreational activities. Is risk from fish consumption the main concern of the CAG? Are there other recreational activities, such as swimming, that are a concern? The CAG may want to ask if EPA can provide human health risk information for other recreational activities if knowing the risks would affect CAG input into the decision-making process.

EPA is correct in stating that fish consumption is the primary human health concern. Ingestion of species which have accumulated these very harmful toxins should be the primary concern. Because of other concerns such as sewage treatment facility discharge (as mentioned above under issue #6), swimming is not allowed in the Passaic River. In fact, because of these other concerns, it is highly unlikely that the Passaic River will be swimmable in any of our lifetimes and it should not be a primary concern of the CAG.

"Other recreational activities" is a very broad term and difficult to directly address. Boating would be the other primary usage of the river, which is currently allowed and quite active. Boating is also well represented on the CAG and issues surrounding boating are frequently discussed. Because the river is currently safe for boating and swimming is not currently achievable, fish consumption should be the primary health concern of the CAG.

8. In a letter to the NRRB, Baykeeper indicated the desire for a navigational channel for the lower Passaic River. The 2007 FFS discusses depths required for navigation for different sections of the lower 8 miles of the river. The CAG may want to discuss with EPA if and how the proposed remedy will accomplish both environmental cleanup and a navigational channel.

Discussions revolving around achieving both the authorized navigational channel and an appropriate environmental cleanup have been discussed several times at CAG meetings before. It was also mentioned in the PRC's comment to the NRRB. Unfortunately the US Army Corps of Engineers (USACE), who is the coleading agency on this project, has never fully addressed this desire. The river was maintained at a navigational depth for some time, but USACE stopped maintenance dredging because of concerns related to the disposal of contaminated sediments. Dredging the authorized navigational channel is appropriate, beneficial for the adjacent municipalities, and very pertinent. This is the opportunity to do so. The issue at hand is not whether or not this topic should be discussed at CAG meetings, it is trying to get a meaningful response from USACE and the EPA.

9. The CAG may want more information about how EPA's proposed cleanup alternatives for the lower 8 miles of the river will affect daily life of the surrounding community.

This issue is very ambiguous and open-ended. EPA should address it with their 2012 Draft FFS. We also feel that, if the public were given a review of how

various alternatives will affect daily life of the area, they would be in favor of having the authorized navigational channel dredged. Dredging this channel will provide new economic opportunities which have been missing for over 50 years.